MUHAMMAD GHUFRAN ASHRAF

Senior Network & Infrastructure Security Specialist | CISSP | MSc Information Security

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United Kingdom No Sponsorship Required

PROFESSIONAL SUMMARY

Senior Network & Infrastructure Security Specialist with over 15 years of experience designing, implementing and delivering enterprise network infrastructure projects across complex, mission-critical environments. Extensive hands-on experience in enterprise routing & switching, LAN/WAN, data centre networking, network troubleshooting, technical implementation, and infrastructure change delivery. Experienced in supporting large-scale enterprise IP networks, firewalls, VPNs, DNS, and high-availability network infrastructure, with a proven ability to troubleshoot complex technical issues and restore critical services.

Proven track record of delivering secure, resilient, and scalable infrastructure by implementing enterprise security solutions, strengthening cyber resilience, and improving organisational security posture. Extensive experience in information security governance, risk management, regulatory compliance, security policy development, audit coordination, vulnerability management, incident response, and implementing security controls aligned with industry best practices.

Experienced in providing technical leadership, mentoring engineers, leading cross-functional technical teams, managing enterprise network operations, driving infrastructure transformation initiatives, and collaborating with business, security, architecture, and technology stakeholders to deliver secure, resilient, and high-performing network services.

TECHNICAL SKILLS

Enterprise Networking	LAN, WAN, Routing & Switching, BGP, OSPF, VLANs, Enterprise Network Design, Enterprise Network Support, TCP/IP, High Availability, Network Troubleshooting, Infrastructure Operations
Network Technologies	Multi-vendor enterprise routing and switching experience across Juniper and Huawei environments, with a strong understanding of Cisco enterprise networking technologies and enterprise network infrastructure operations.
Enterprise Firewall Engineering	Juniper SRX and Huawei USG: security zones, firewall policies, ACLs, NAT, high-availability clustering and enterprise firewall lifecycle management.
Data Center Design	Multitier DC architecture, core/aggregation/access, high availability, redundancy, east west traffic control
VMware NSX	NSX micro segmentation, distributed firewalling, virtual switching & routing, SDN overlay
Zero Trust Architecture	Identity based access, least privilege policy design and micro segmentation
VPN Technologies	IPSec Site-to-Site VPN, GRE tunnels, WAN traffic encryption, PKI integration
NOC Monitoring Tools	IBM Tivoli, PRTG, SolarWinds NPM — enterprise NOC monitoring across 1,500+ locations
SIEM & QRadar	IBM QRadar deployment, network security log integration, log source onboarding, correlation rules, use case development, dashboards

Network Segmentation	Macro & micro segmentation, DMZ design, ACL policy frameworks, east west isolation across 10 data centers
Project Delivery	Infrastructure Project Delivery, Network Change Implementation, Infrastructure Upgrades, Technical Documentation, Change Management, Implementation Planning, Stakeholder Collaboration
Network Operations	24×7 Enterprise Operations, Incident Management, Major Incident Response, Service Restoration, Root Cause Analysis

PROFESSIONAL EXPERIENCE

Senior Network and Infrastructure Security Specialist
Oct 2022 – Jul 2026

Government of Pakistan

- Designed, implemented, maintained, and supported business critical enterprise LAN/WAN and data centre networks across 10 data centres and more than 1,500 enterprise locations, including routing, switching, perimeter firewalls, WAN encryption, ACL frameworks and VMware NSX micro-segmentation.
- Designed and enforced Zero Trust aligned segmentation policies, leveraging distributed firewalling and least privilege controls to secure east west traffic across all virtualized workloads.
- Managed the full firewall policy lifecycle for Juniper SRX and Huawei USG, covering zone architecture, ACL rule engineering, NAT strategies, and periodic rule base optimization to eliminate redundancies and strengthen policy hygiene.
- Engineered and led SOC operations end to end, including IBM QRadar SIEM tuning, custom correlation logic, alert triage workflows, escalation runbooks, and incident response processes supporting 1,500+ sites.
- Oversaw enterprise wide NOC monitoring using PRTG and SolarWinds NPM, ensuring real time visibility into network health, device availability, and WAN performance across distributed environments.
- Led major incident resolution and acted as the technical escalation point for complex enterprise network issues, performing root cause analysis across routing, switching, VPN and firewall services to restore critical business operations and improve service resilience.
- Planned, documented and implemented enterprise network infrastructure changes while developing technical standards, configuration baselines, implementation plans and rollback procedures to minimise operational risk.
- Led and mentored a 15 member network and cybersecurity team across NOC and SOC functions, providing technical leadership, operational oversight, workload planning, coaching, and continuous service improvement.

Senior Network and Security Engineer
Aug 2017 – Sep 2022

Government of Pakistan

- Designed and implemented enterprise grade firewall architectures using Juniper SRX and Huawei USG, including zone based security models, HA clustering, NAT strategies, deep packet inspection, and full lifecycle management of security policies and rule bases.
- Delivered secure and scalable network solutions across multisite data centre environments, supporting routing, switching, load balancing, and segmentation initiatives to strengthen overall infrastructure resilience and operational efficiency.
- Reduced the organization’s attack surface by more than 50% through macro and micro segmentation strategies and by establishing segmentation controls as a core Zero Trust mechanism to prevent east west lateral movement across virtualized workloads.
- Directed both NOC and SOC operations in high security government environments, overseeing network monitoring via IBM Tivoli, PRTG, and SolarWinds NPM, and deploying IBM QRadar SIEM with custom correlation rules, dashboards, and incident response workflows to enhance threat detection and visibility.
- Served as an ICT instructor and technical trainer, delivering professional courses in networking, security fundamentals, and infrastructure technologies, helping students and junior engineers build strong foundational and practical skills.

Network and NOC team lead
Jun 2014 – Jul 2017

Government of Pakistan

- Led network and security operations across data centre and branch environments, overseeing firewall policy administration, routing configuration, and VLAN design to ensure stable and secure enterprise connectivity.
- Designed and maintained high availability and disaster recovery architectures, including redundant DC links, failover routing, load balancer optimization, and scheduled DR drills.
- Deployed, configured, and finetuned firewalls, core switches, and load balancers enhancing ACL efficiency, QoS performance, and spanning tree stability for improved reliability and security.
- Strengthened NOC operational maturity through proactive monitoring practices, structured troubleshooting workflows, and the development of detailed DR and operational runbooks.

Junior Network Administrator
Apr 2010 – May 2014

Government of Pakistan

- Configured, maintained and supported enterprise LAN/WAN infrastructure including switches, routers, firewalls, VPNs and network security devices across distributed environments.
- Assisted in implementing firewall policies by contributing to zone design, traffic inspection rules, WAN encryption, and VPN tunnel configuration for multiple branch locations.
- Monitored network health and device performance using IBM Tivoli, PRTG, and SolarWinds NPM, ensuring uptime, link visibility, and proactive issue detection.
- Supported SOC operations through IBM QRadar, participating in log analysis, alert triage, and continuous security monitoring activities.

CERTIFICATIONS

CISSP – Certified Information Systems Security Professional

EDUCATION

MS in Information Security
2015 – 2019

NUST School of Electrical Engineering and Computer Science, Islamabad

Bachelor's in Electrical Telecommunication Engineering
2005 – 2009

University of Engineering and Technology, Lahore